# Exhibit 5 – Safety Margin Testing

A series of emissions analyses were undertaken to assist GA EPD in developing the MVEB safety margins. These tests include a worst case scenario of the RTP horizon year, 2040, which produces 10% more VMT than projected, 1 million more inhabitants (reflected in source type population), and an age distribution 2 years older than current data suggests for the year 2040. These analyses were developed to help GA EPD establish a realistic motor vehicle emissions budget safety margin for use in transportation conformity. 2040 and the 2040 worst case emissions are reflected in Table 1 and 2, below.

**Table 1 – 2040 Scenario Testing Daily Ozone Precursor Emissions**

|  |  |  |
| --- | --- | --- |
| Pollutant | 2040 Tons/Day  (% above 2024) | 2040 Worst Case Tons/Year  (% above 2024) |
| NOx | 103.42 (4%) | 126.24 (27%) |
| VOC | 70.97 (14%) | 91.70 (47%) |

**Table 2 – 2040 Scenario testing Annual PM2.5 Precursor Emissions**

|  |  |  |
| --- | --- | --- |
| Pollutant | 2040 Tons/Year  (% above 2024) | 2040 Worst Case Tons/Year  (% above 2024) |
| NOx | 36,150.78 (3%) | 44,429.34 (26%) |
| PM2.5 | 1,938.27 (18%) | 2,281.15 (39%) |